

# Rabbit Anti-CRX1 antibody

## SL3798R

Product Name:	CRX1
Chinese Name:	CRX抗体
Alias:	Crx; Crx-1; Crx 1; CRD; LCA7; CRX_HUMAN.
	X C
	Specific References(1) SL3798R has been referenced in 1 publications.
文献引用	[IF=2.81]Machalińska, Anna, et al. "Neuroprotective and anti-apoptotic activity of
Pub Med	lineage-negative bone marrow cells after intravitreal injection in a mouse model of acute
;	retinal injury."IHC-P;Mouse.
	PubMed:25810725
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections
	need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	32kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CRX:51-150/299
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.

#### PubMed:

#### PubMed

The protein encoded by this gene is a photoreceptor-specific transcription factor which plays a role in the differentiation of photoreceptor cells. This homeodomain protein is necessary for the maintenance of normal cone and rod function. Mutations in this gene are associated with photoreceptor degeneration, Leber congenital amaurosis type III and the autosomal dominant cone-rod dystrophy 2. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some variants has not been determined. [provided by RefSeq, Jul 2008].

#### Function:

Binds and transactivates the sequence 5'-TAATC[CA]-3' which is found upstream of several photoreceptor-specific genes, including the opsin genes. Acts synergistically with other transcription factors, e.g. NRL and RX, to regulate photoreceptor cell-specific gene transcription. Essential for the maintenance of mammalian photoreceptors.

#### Subunit:

Interacts with SCA7. Interacts with RAX2. Interacts (via the homeobox) with NRL (via the leucine-zipper domain). Interacts with PDC.

#### **Subcellular Location:**

Nucleus.

#### **Tissue Specificity:**

Retina.

Product Detail:

#### DISEASE:

Defects in CRX are the cause of Leber congenital amaurosis type 7 (LCA7) [MIM:613829]. LCA designates a clinically and genetically heterogeneous group of childhood retinal degenerations, generally inherited in an autosomal recessive manner. Affected infants have little or no retinal photoreceptor function as tested by electroretinography. LCA represents the most common genetic cause of congenital visual impairment in infants and children. [DISEASE] Defects in CRX are the cause of cone-rod dystrophy type 2 (CORD2) [MIM:120970]; also known as cone-rod retinal dystrophy 2 (CRD2). CORDs are inherited retinal dystrophies belonging to the group of pigmentary retinopathies. CORDs are characterized by retinal pigment deposits visible on fundus examination, predominantly in the macular region, and initial loss of cone photoreceptors followed by rod degeneration. This leads to decreased visual acuity and sensitivity in the central visual field, followed by loss of peripheral vision. Severe loss of vision occurs earlier than in retinitis pigmentosa.

Defects in CRX are a cause of retinitis pigmentosa (RP) [MIM:268000]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.

#### Similarity:

Belongs to the paired homeobox family. Contains 1 homeobox DNA-binding domain.

SWISS: 043186

Gene ID: 1406

#### Database links:

Entrez Gene: 1406Human

Entrez Gene: 12951 Mouse

Entrez Gene: 60446Rat

Omim: 602225Human

SwissProt: Q9XSK0Cow

SwissProt: Q8SQ03 Dog

SwissProt: O43186Human

SwissProt: O54751Mouse

Unigene: 617342Human

Unigene: 633434Human

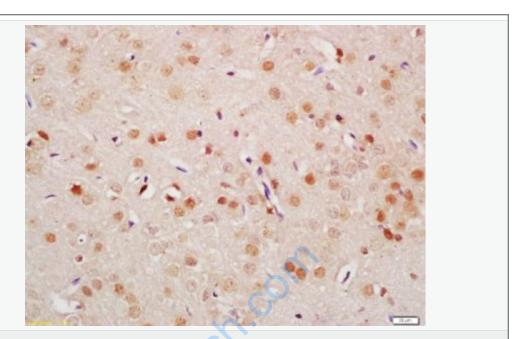
Unigene: 639114Human

Unigene: 441911Mouse

Unigene: 44287Rat

### **Important Note:**

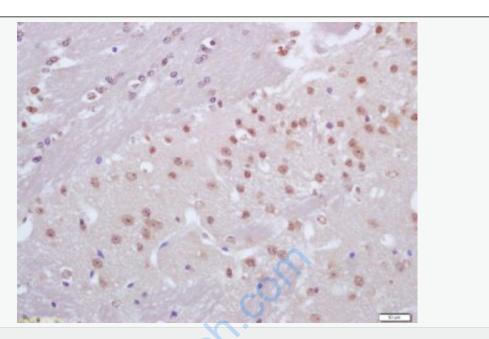
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Picture:

Tissue/cell: mouse brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-CRX1 Polyclonal Antibody, Unconjugated(SL3798R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Protein: rat lung lysates, 30ug;

Primary: Anti-SCD1(SL3798R) at 1:200;

Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL3798R) at 1: 3000;

ECL excitated the fluorescence;

Predicted band size: 41kD

Observed band size: 55kD